2200 SERIES REED RELAYS



2200 Series Reed Relays

Ideally suited to the needs of Automated Test Equipment and RF requirements. The specification tables allow you to select the appropriate relay for your particular application. If your requirements differ, please consult your local representative or Coto's Factory.

2200 Series Features

- ▶ Very small footprint (0.17 in²), high reliability reed relays
- \blacktriangleright High Insulation Resistance $10^{12}\,\Omega$ available with model 2204
- High speed switching compared to electromechanical relays
- Hermetically sealed contacts for long life
- Epoxy coated steel shell provides magnetic shielding
- Optional Electrostatic Shield for reducing capacitive coupling
- \blacktriangleright Optional Coaxial Shield for 50 Ω impedance and switching of fast rise time digital pulses offered on Form A
- ▶ Relay models 2200-2301, 2200-2302 are ATE industry standards
- ► Specifically engineered for OEM designs and maintenance of existing production fixtures
- ▶ RoHS compliant

DIMENSIONS





.210 — — (5.33)		
t i i i i i i i i i i i i i i i i i i i		.225 (5.72)
.020 (0.51)		.100 (2.54)
.018 Dia (0.46)	. pins	5

		Part Number			
NOTE	Model N 2204	umber Coil Voltano		Shielding Options ² 0=No Shielding	
Model # s 2200-2301 & 2200-2302 represent complete part numbers.	2211	05=5 volts 12=12 volts	Coil Options 3=use for Model #2204 (12 volt coil) and Model #2211 (5 & 12 volt coil) 4=use for Model #2204 (5 volt coil)	1=Electrostatic Shield (N/A on Model #2211) 2=Coaxial Shield (N/A on Model #2211)	
				070	82013

tel: (401) 943.2686

fax: (401) 942.0920

MODEL NUMBER			2204	2211	2200- 2301	2200- 2302				
Parameters	Test Conditions	Units	1 Form A	1 Form C	1 Form A Electrostatic Shield	1 Form A Coaxial Shield				
COIL SPECS.										
Nom. Coil Voltage		VDC	5 12	5 12	5	5				
Coil Resistance	+/- 10%, 25° C	Ω	370 1500	230 1500	150	150				
Operate Voltage	Must Operate by	VDC - Max.	3.8 9.0	3.8 9.0	3.6	3.6				
Release Voltage	Must Release by	VDC - Min.	0.4 1.0	0.4 1.0	0.5	0.5				
CONTACT RATINGS										
Switching Voltage	Max DC/Peak AC Resist.	Volts	200	100	150	150				
Switching Current	Max DC/Peak AC Resist.	Amps	0.5	0.25	0.5	0.5				
Carry Current	Max DC/Peak AC Resist.	Amps	1.0	0.5	1.0	1.0				
Contact Rating	Max DC/Peak AC Resist.	Watts	10	3	10	10				
Life Expectancy-Typical ¹	Signal Level 1.0V, 10mA	x 10º Ops.	500	100	500	500				
Rated Loads		x 10º Ops.	5	5	5	5				
Static Contact Resistance (max. init.)	50mV, 10mA	Ω	0.100	0.150	0.150	0.150				
Dynamic Contact Resistance (max. init.)	0.5V, 50mA at 100 Hz, 1.5 msec	Ω	0.200	0.200	0.200	0.200				
RELAY SPECIFICATIONS										
Insulation Resistance (minimum)	Between all Isolated Pins at 100V, 25°C, 40% RH	Ω	10 ¹²	10 ¹¹	1011	10 ¹¹				
Capacitance - Typical Across Open Contacts	Shield Floating Shield Guarding	pF pF	0.9 0.2	0.9 N/A	0.9 0.2	0.9 0.2				
Dielectric Strength (minimum)	Between Contacts Contacts to Shield Contacts/Shield to Coil	VDC/peak AC VDC/peak AC VDC/peak AC	250 250 1500	200 N/A 1500	250 250 1500	250 250 1500				
Operate Time - including bounce	At Nominal Coil Voltage, 30 Hz Square Wave	msec.	0.5 (typ.)	1.0 (typ.)	0.55 (max.)	0.55 (max.)				
Release Time - Typical		msec.	0.1	2.0	0.1	0.1				
Dot stam	ped on top of relay refers to Grid = .1"x.1" (2.54)	Top View: pin #1 location mm x 2.54mm)	$5 \bullet 0 + 4 \\ 6 \circ 0 + 3 \\ 7 \circ 0 + 2 \\ 8 \bullet 0 + 2 \\ 1 + $		5 • • 4 6 • • 3 7 • • 2 8 • • 1	$ \begin{array}{c} 5 \\ 6 \\ 7 \\ 8 \\ 6 \\ 7 \\ 8 \\ 1 \end{array} $				

Notes:

- $^{\rm 1}$ Consult factory for life expectancy at other switching loads.
- ² Model 2204, pin #7 is tied to optional electrostatic shield, pins #6 & #7 are tied to optional coaxial shield.

Environmental Ratings:

Storage Temp: -35°C to *100°C; Operating Temp: -20°C to *85°C; Solder Temp: 270°C max; 10 sec. max All electrical parameters measured at 25°C unless otherwise specified. Vibration: 20 G's to 2000 Hz; Shock: 50 G's